SCORE Search Results Details for Application 10552515 and Search Result 20080630 | 144055 | us-10-552-515-4 rag

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This page gives you Search Results detail for the Application 10552515 and Search Result 20080630_144055_us-10-552-515-4.rag.

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OM protein - protein search, using sw model

Run on: June 30, 2008, 17:43:01; Search time 71 Seconds

(without alignments)

76.429 Million cell updates/sec

Title: US-10-552-515-4

Perfect score: 42

Sequence: 1 VLLEVVPDV 9

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 3405708 seqs, 601879884 residues

Total number of hits satisfying chosen parameters: 3405708

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database: A_Geneseq_200711:*

1: geneseqp1980s:*

2: geneseqp1990s:*

3: geneseqp2000:*

4: geneseqp2001:*

5: geneseqp2002:*

6: geneseqp2003a:*

7: genesegp2003b:*

8: geneseqp2004a:*

9: geneseqp2004b:*
10: geneseqp2005:*
11: geneseqp2006:*
12: geneseqp2007:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

응 Result Query No. Score Match Length DB ID Description 100.0 1 42 9 ADT77667 Adt77667 Splice va 8 2 42 100.0 AEB13424 Aeb13424 Human pro 843 10 3 42 100.0 10 885 AEB13426 Aeb13426 Human pro 4 42 100.0 898 4 ABG15488 Abg15488 Novel hum 5 42 100.0 933 ADT77664 Adt77664 Splice va 8 6 42 100.0 933 11 AEL84788 Ael84788 Tumor mar 7 36 85.7 258 Aar85775 L. lactis AAR85775 8 36 85.7 278 5 ABB53746 Abb53746 Lactococc 9 35 83.3 324 6 ABM68555 Abm68555 Photorhab 10 34 81.0 218 10 ABM92385 Abm92385 M. xanthu 81.0 11 34 271 11 AFC47341 Afc47341 Wheat ami 34 11 12 81.0 292 AFC47340 Afc47340 Wheat ami 34 81.0 323 AFC47339 Afc47339 Wheat ami 13 11 14 34 81.0 374 AF062535 Afq62535 Glycine m 15 34 81.0 407 7 ADM26215 Adm26215 Hyperther 34 81.0 440 Afq62538 Glycine m 16 AFQ62538 17 34 81.0 721 Abg02181 Novel hum ABG02181 18 34 81.0 821 7 Adm26833 Hyperther ADM26833 19 34 81.0 Abg03981 Novel hum 1189 ABG03981 34 20 81.0 1189 ABG06603 Abq06603 Novel hum 21 34 81.0 1189 Abg02166 Novel hum ABG02166 22 34 81.0 Abq07841 Novel hum 1189 ABG07841 23 34 81.0 1189 ABG17475 Abq17475 Novel hum 24 34 81.0 1189 ABG14742 Abg14742 Novel hum 25 34 81.0 1228 ABG23202 Abg23202 Novel hum 34 81.0 1259 ABG18492 26 Abq18492 Novel hum 27 34 81.0 1357 ABG19664 Abg19664 Novel hum 81.0 28 34 2023 ABG06741 Abq06741 Novel hum Aau81984 Human sec 29 33 78.6 130 5 AAU81984 30 33 78.6 563 ADS43542 Ads43542 Bacterial 8 78.6 31 33 738 AEN37939 Aen37939 Dictyoste 10 Adv44749 Human nuc 33 78.6 1112 32 10 ADV44749 78.6 33 33 1112 12 AEN00030 Aen00030 Human nuc 34 33 78.6 1121 6 ABO07112 Abo07112 Novel hum 35 32 76.2 71 5 ABP01740 Abp01740 Human ORF

| 36 | 32 | 76.2 | 133 | 4 | AAU58272 | Aau58272 Propionib |
|----|----|------|-----|----|----------|--------------------|
| 37 | 32 | 76.2 | 133 | 6 | ABM54791 | Abm54791 Propionib |
| 38 | 32 | 76.2 | 145 | 8 | AFQ11484 | Afq11484 Glycine m |
| 39 | 32 | 76.2 | 187 | 9 | AFQ55056 | Afq55056 Glycine m |
| 40 | 32 | 76.2 | 188 | 7 | ADC95685 | Adc95685 E. faeciu |
| 41 | 32 | 76.2 | 206 | 2 | AAW20456 | Aaw20456 H. pylori |
| 42 | 32 | 76.2 | 309 | 4 | ABG17090 | Abg17090 Novel hum |
| 43 | 32 | 76.2 | 324 | 5 | AAE25510 | Aae25510 Kluyverom |
| 44 | 32 | 76.2 | 324 | 10 | AED26279 | Aed26279 Novel hum |
| 45 | 32 | 76.2 | 341 | 7 | ADF04428 | Adf04428 Bacterial |

ALIGNMENTS

```
RESULT 1
ADT77667
ID
     ADT77667 standard; peptide; 9 AA.
XX
АC
     ADT77667;
XX
DT
     13-JAN-2005 (first entry)
XX
DE
     Splice variant-novel gene expressed in prostate (SV-NGEP) epitope.
XX
KW
     Splice variant-novel gene expressed in prostate; SV-NGEP; human;
     prostate cancer; cytostatic; gene therapy; immunotherapy; epitope.
KW
XX
OS
     Homo sapiens.
XX
     WO2004092213-A1.
PN
XX
     28-OCT-2004.
PD
XX
PF
     05-APR-2004; 2004WO-US010588.
XX
PR
     08-APR-2003; 2003US-0461399P.
XX
PA
     (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PΙ
     Pastan I, Bera TK, Lee B;
XX
     WPI; 2004-758338/74.
DR
XX
PΤ
     New Splice Variant-Novel Gene Expressed in Prostate polypeptide or
     encoding nucleic acid molecule for diagnosing, preventing or treating
PΤ
PΤ
     cancer, especially prostate cancer.
XX
```

Disclosure; SEQ ID NO 4; 88pp; English.

PS

```
XX
CC
     The present sequence is that of a predicted epitope of human splice
     variant-novel gene expressed in prostate (SV-NGEP) ADT77664. The epitope
CC
CC
     is predicted to bind HLA2-01 and was identified using an HLA binding
CC
     motif program. It corresponds to amino acids 215-223 of SV-NGEP.
     Polypeptides comprising an immunogenic fragment of 8 consecutive amino
CC
CC
     acids of SV-NGEP which specifically bind to an antibody that specifically
CC
     binds a polypeptide comprising amino acids 157-933 of SV-NGEP are
CC
     claimed. The invention provides methods for: detecting prostate cancer in
     a subject by contacting a sample with an antibody that specifically binds
CC
CC
     a SV-NGEP polypeptide and detecting the formation of an immune complex,
     or detecting an increase in expression of SV-NGEP polypeptide or mRNA;
CC
     producing an immune response against a cell expressing SV-NGEP, for
CC
CC
     example in a subject with prostate cancer, by administering SV-NGEP
     polypeptide or polynucleotide to produce an immune response that
CC
     decreases growth of the prostate cancer; inhibiting the growth of a
CC
CC
     malignant cell that expresses SV-NGEP by culturing cytotoxic T
     lymphocytes (CTLs) with SV-NGEP to produce activated CTLs, and contacting
CC
     these with the malignant cell; and inhibiting the growth of a malignant
CC
CC
     cell by contact with an antibody that specifically binds SV-NGEP, where
CC
     the antibody is linked to a chemotherapeutic agent or toxin.
XX
SO
     Sequence 9 AA;
 Query Match
                         100.0%; Score 42; DB 8; Length 9;
 Best Local Similarity 100.0%; Pred. No. 2.9e+06;
 Matches 9; Conservative 0; Mismatches 0;
                                                                 0;
                                                       Indels
                                                                     Gaps
                                                                             0;
            1 VLLEVVPDV 9
QУ
              1 VLLEVVPDV 9
Db
RESULT 2
AEB13424
    AEB13424 standard; protein; 843 AA.
ID
XX
АC
    AEB13424;
XX
DT
     22-SEP-2005 (first entry)
XX
\mathsf{DE}
     Human prostate specific polypeptide #1.
XX
KW
     Screening; diagnosis; drug delivery; prostate specific polypeptide;
     cancer; prostate tumor; cytostatic; neoplasm.
KW
XX
OS
     Homo sapiens.
XX
PN
     WO2005062788-A2.
```

```
XX
PD
     14-JUL-2005.
XX
     16-DEC-2004; 2004WO-US042406.
PF
XX
     22-DEC-2003; 2003US-0531809P.
PR
XX
     (AVAL-) AVALON PHARM INC.
PA
XX
PΙ
     Weigle B,
                Ebner R;
XX
     WPI; 2005-497793/50.
DR
     N-PSDB; AEB13423.
DR
XX
```

XX

PS XX CC

CC

CC

CC

CC

CC

CC CC

CC

CC

CC CC

CC

CC

CC CC

CC

CC

CC

CC

CC CC

CC CC

CC

CC CC

CC

CC CC

PT Novel isolated prostate specific polypeptide, useful for treating cancer, PT and identifying agent that modulates activity of cancer related gene.

Claim 12; SEQ ID NO 3; 59pp; English.

The invention relates to an isolated prostate specific polypeptide comprising one or more immunogenic fragments. The invention also relates to a method of identifying an agent that modulates the activity of a cancer related gene involving contacting a compound with a cell containing a gene under conditions promoting the expression of the gene, detecting a difference in expression of the gene relative to when the compound is not present and identifying an agent that modulates the activity of a cancer related gene, a method of identifying an antineoplastic agent involving contacting a cell exhibiting neoplastic activity with a compound first identified as a cancer related gene modulator using and determining a decrease in neoplastic activity after contacting, when compared to when the contacting does not occur, or administering an agent first identified to an animal exhibiting a cancer condition and detecting a decrease in cancerous condition, a method of determining the cancerous status of a cell involving determining an increase in the level of expression in a cell of a gene where an elevated expression relative to a known non-cancerous cell indicates a cancerous state or potentially cancerous state, an antibody that reacts with a prostate specific polypeptide, an immunoconjugate comprising the antibody and a cytotoxic agent, a method of treating cancer involving contacting a cancerous cell in vivo with an agent having activity against a prostate specific polypeptide and an immunogenic composition the prostate specific polypeptide. The prostate specific polypeptide is useful for identifying an agent that modulates the activity of a cancer related gene. The immunogenic composition is useful for treating cancer, preferably prostate cancer in an animal, e.g. human, which involves administering the immunogenic composition that is sufficient to elicit the production of cytotoxic T lymphocytes specific for the prostate specific polypeptide. The invention is useful for identifying anti-neoplastic agents. This sequence represents a human prostate specific polypeptide of

```
SCORE Search Results Details for Application 10552515 and Search Result 20080630_144055_us-10-552-515-4.rag.
CC
     the invention.
XX
SO
     Sequence 843 AA;
  Query Match
                          100.0%; Score 42; DB 10; Length 843;
  Best Local Similarity 100.0%; Pred. No. 22;
  Matches 9; Conservative 0; Mismatches
                                                   0; Indels 0; Gaps
                                                                                 0;
            1 VLLEVVPDV 9
Qу
              Db
          216 VLLEVVPDV 224
RESULT 3
AEB13426
     AEB13426 standard; protein; 885 AA.
ID
XX
АC
     AEB13426;
XX
DT
     22-SEP-2005 (first entry)
XX
DE
     Human prostate specific polypeptide #2.
XX
KW
     Screening; diagnosis; drug delivery; prostate specific polypeptide;
KW
     cancer; prostate tumor; cytostatic; neoplasm.
XX
     Homo sapiens.
OS
XX
PN
     WO2005062788-A2.
XX
     14-JUL-2005.
PD
XX
PF
     16-DEC-2004; 2004WO-US042406.
XX
     22-DEC-2003; 2003US-0531809P.
PR
XX
PΑ
     (AVAL-) AVALON PHARM INC.
XX
PΙ
     Weigle B, Ebner R;
XX
     WPI; 2005-497793/50.
DR
     N-PSDB; AEB13425.
DR
XX
PT
     Novel isolated prostate specific polypeptide, useful for treating cancer,
     and identifying agent that modulates activity of cancer related gene.
PT
XX
PS
     Claim 12; SEQ ID NO 5; 59pp; English.
```

The invention relates to an isolated prostate specific polypeptide

XX CC comprising one or more immunogenic fragments. The invention also relates to a method of identifying an agent that modulates the activity of a cancer related gene involving contacting a compound with a cell containing a gene under conditions promoting the expression of the gene, detecting a difference in expression of the gene relative to when the compound is not present and identifying an agent that modulates the activity of a cancer related gene, a method of identifying an antineoplastic agent involving contacting a cell exhibiting neoplastic activity with a compound first identified as a cancer related gene modulator using and determining a decrease in neoplastic activity after contacting, when compared to when the contacting does not occur, or administering an agent first identified to an animal exhibiting a cancer condition and detecting a decrease in cancerous condition, a method of determining the cancerous status of a cell involving determining an increase in the level of expression in a cell of a gene where an elevated expression relative to a known non-cancerous cell indicates a cancerous state or potentially cancerous state, an antibody that reacts with a prostate specific polypeptide, an immunoconjugate comprising the antibody and a cytotoxic agent, a method of treating cancer involving contacting a cancerous cell in vivo with an agent having activity against a prostate specific polypeptide and an immunogenic composition the prostate specific polypeptide. The prostate specific polypeptide is useful for identifying an agent that modulates the activity of a cancer related gene. The immunogenic composition is useful for treating cancer, preferably prostate cancer in an animal, e.g. human, which involves administering the immunogenic composition that is sufficient to elicit the production of cytotoxic T lymphocytes specific for the prostate specific polypeptide. The invention is useful for identifying anti-neoplastic agents. This sequence represents a human prostate specific polypeptide of the invention.

SQ Sequence 885 AA;

CC CC

CC CC

CC

CC CC

CC

CC

CC CC

CC

CC CC

CC

CC CC

CC CC

CC

CC

CC

CC

CC

CC

CC CC

CC CC

CC

XX

```
Query Match 100.0%; Score 42; DB 10; Length 885;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
RESULT 4
ABG15488
ID ABG15488 standard; protein; 898 AA.
XX
AC ABG15488;
XX
DT 18-FEB-2002 (first entry)
```

XX

CC

```
Novel human diagnostic protein #15479.
DE
XX
     Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW
     food supplement; medical imaging; diagnostic; genetic disorder.
KW
XX
OS
     Homo sapiens.
XX
PN
     WO200175067-A2.
XX
PD
     11-OCT-2001.
XX
PF
     30-MAR-2001; 2001WO-US008631.
XX
     31-MAR-2000; 2000US-00540217.
PR
     23-AUG-2000; 2000US-00649167.
PR
XX
PA
     (HYSE-) HYSEQ INC.
XX
PΙ
     Drmanac RT, Liu C, Tang YT;
XX
DR
     WPI; 2001-639362/73.
DR
     N-PSDB; AAS79675.
XX
     New isolated polynucleotide and encoded polypeptides, useful in
PΤ
     diagnostics, forensics, gene mapping, identification of mutations
PT
PT
     responsible for genetic disorders or other traits and to assess
     biodiversity.
PΤ
XX
PS
     Claim 20; SEQ ID NO 45847; 103pp; English.
XX
CC
     The invention relates to isolated polynucleotide (I) and polypeptide (II)
     sequences. (I) is useful as hybridisation probes, polymerase chain
CC
     reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC
CC
     and in recombinant production of (II). The polynucleotides are also used
CC
     in diagnostics as expressed sequence tags for identifying expressed
CC
     genes. (I) is useful in gene therapy techniques to restore normal
CC
     activity of (II) or to treat disease states involving (II). (II) is
CC
     useful for generating antibodies against it, detecting or quantitating a
     polypeptide in tissue, as molecular weight markers and as a food
CC
CC
     supplement. (II) and its binding partners are useful in medical imaging
CC
     of sites expressing (II). (I) and (II) are useful for treating disorders
CC
     involving aberrant protein expression or biological activity. The
     polypeptide and polynucleotide sequences have applications in
CC
     diagnostics, forensics, gene mapping, identification of mutations
CC
CC
     responsible for genetic disorders or other traits to assess biodiversity
CC
     and to produce other types of data and products dependent on DNA and
CC
     amino acid sequences. ABG00010-ABG30377 represent novel human diagnostic
```

amino acid sequences of the invention. Note: The sequence data for this

```
patent did not appear in the printed specification, but was obtained in
CC
     electronic format directly from WIPO at
CC
     ftp.wipo.int/pub/published_pct_sequences
CC
XX
SQ
     Sequence 898 AA;
                          100.0%; Score 42; DB 4; Length 898;
 Query Match
 Best Local Similarity
                         100.0%; Pred. No. 23;
           9; Conservative 0; Mismatches 0;
                                                       Indels
                                                                 0;
                                                                             0;
 Matches
                                                                     Gaps
Qу
            1 VLLEVVPDV 9
              Db
         308 VLLEVVPDV 316
RESULT 5
ADT77664
     ADT77664 standard; protein; 933 AA.
ID
XX
АC
    ADT77664;
XX
DT
     15-JUN-2007 (revised)
DT
     13-JAN-2005 (first entry)
XX
DE
     Splice variant-novel gene expressed in prostate (SV-NGEP) polypeptide.
XX
     Splice variant-novel gene expressed in prostate; SV-NGEP; human;
KW
     prostate cancer; cytostatic; gene therapy; immunotherapy; BOND_PC;
KW
     NGEP long variant; NGEP long variant [Homo sapiens]; GO5886.
ΚW
XX
OS
     Homo sapiens.
XX
                     Location/Qualifiers
FH
    Key
                     1. .345
FT
    Domain
FT
                     /label= Cytoplasmic
FT
    Region
                     157. .933
FΤ
                     /note= "An immunogenic fragment comprising 8 consecutive
                     amino acids that specifically binds to an antibody that
FT
FT
                     specifixally binds to a polypeptide comprising amino
                     acids 157-933 is referred to in Claim 1"
FT
                     170. .178
FT
    Region
                     /note= "Epitope, predicted to bind HLA2-01"
FT
FT
                     215. .223
    Region
FT
                     /note= "Epitope, predicted to bind HLA2-01"
                     258. .266
FT
     Region
FT
                     /note= "Epitope, predicted to bind HLA2-01"
FΤ
                     346. .368
     Domain
FT
                     /label= Transmembrane
FΤ
     Domain
                     369. .421
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                      /label= External
                      /note= "Cell surface"
FΤ
FT
     Region
                      403. .411
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FT
     Domain
                      422. .441
FΤ
                      /label= Transmembrane
FT
     Region
                      427. .435
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FT
     Domain
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                      502. .524
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FT
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                      525. .543
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FT
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FΤ
     Region
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FΤ
     Region
                      562. .570
                      /note= "Epitope, predicted to bind HLA2-01"
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FΤ
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                      567. .586
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     Domain
                      587. .609
FT
                      /label= Transmembrane
                      610. .714
FT
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FT
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FT
FT
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                      715. .737
                      /label= Transmembrane
FT
                      738. .761
FT
     Domain
FT
                      /label= Cytoplasmic
                      762. . 784
FT
     Domain
                      /label= Transmembrane
FT
     Domain
                      785. .933
FT
FT
                      /label= External
FT
                      /note= "Cell surface"
                      846. .854
FT
     Region
FT
                      /note= "Epitope, predicted to bind HLA2-01"
XX
PN
     WO2004092213-A1.
XX
     28-OCT-2004.
PD
XX
PF
     05-APR-2004; 2004WO-US010588.
XX
PR
     08-APR-2003; 2003US-0461399P.
XX
PA
     (USSH ) US DEPT HEALTH & HUMAN SERVICES.
```

```
XX
PΙ
     Pastan I, Bera TK, Lee B;
XX
     WPI; 2004-758338/74.
DR
     N-PSDB; ADT77665.
DR
     PC:NCBI; gi48093524.
DR
XX
     New Splice Variant-Novel Gene Expressed in Prostate polypeptide or
PT
PΤ
     encoding nucleic acid molecule for diagnosing, preventing or treating
PT
     cancer, especially prostate cancer.
XX
PS
     Claim 1; SEQ ID NO 1; 88pp; English.
XX
CC
     The present sequence is the protein sequence of splice variant-novel gene
     expressed in prostate (SV-NGEP). SV-NGEP is identical to NGEP from amino
CC
     acid 1-157, diverging from amino acid 158. Expression analysis in 76
CC
     normal and foetal tissues showed SV-NGEP to be strongly expressed only in
CC
CC
     a prostate sample. Claimed methods for detecting prostate cancer in a
CC
     subject comprise: contacting the sample with an antibody that
CC
     specifically binds a SV-NGEP polypeptide and detecting the formation of
CC
     an immune complex; or detecting an increase in expression of SV-NGEP
CC
     polypeptide or mRNA. Antibodies to an SV-NGEP polypeptide can be used to
CC
     detect metastatic prostate cancer cells at locations other than the
CC
     prostate. A claimed method for producing an immune response against a
     cell expressing SV-NGEP, for example in a subject with prostate cancer,
CC
     comprises administering the polypeptide, or a polynucleotide encoding it,
CC
CC
     to produce an immune response that decreases growth of the prostate
CC
     cancer. A claimed method for inhibiting the growth of a malignant cell
CC
     that expresses SV-NGEP comprises culturing cytotoxic T lymphocytes (CTLs)
     with SV-NGEP to produce activated CTLs that recognise an NGEP expressing
CC
CC
     cell, and contacting the malignant cell with the activated CTLs.
CC
     Alternatively, growth of a malignant cell is inhibited by contact with an
CC
     antibody that specifically binds an SV-NGEP polypeptide, where the
     antibody is linked to an effector molecule (chemotherapeutic agent or
CC
CC
     toxin) that inhibits growth of the malignant cell. This may be performed
CC
     in vivo. Kits for detecting an SV-NGEP polypeptide or polynucleotide in a
CC
     sample are also claimed.
CC
CC
     Revised record issued on 15-JUN-2007: Enhanced with precomputed
CC
     information from BOND.
XX
SO
     Sequence 933 AA;
 Query Match
                          100.0%; Score 42; DB 8; Length 933;
 Best Local Similarity 100.0%; Pred. No. 24;
           9; Conservative 0; Mismatches 0;
                                                                 0;
 Matches
                                                       Indels
                                                                     Gaps
                                                                             0;
Qу
            1 VLLEVVPDV 9
```

Db 215 VLLEVVPDV 223

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RESULT 6
AEL84788
     AEL84788 standard; protein; 933 AA.
ID
XX
АC
     AEL84788;
XX
DT
     18-OCT-2007 (revised)
DT
     15-JUN-2007 (revised)
     28-DEC-2006
DT
                  (first entry)
XX
     Tumor marker gene NGEP SEQ ID NO 155.
\mathsf{DE}
XX
     cytostatic; diagnosis; prognosis; tumor marker; gene expression;
KW
     drug screening; cancer; neoplasm; NGEP; BOND_PC; NGEP long variant;
KW
     G05886.
KW
XX
OS
     Homo sapiens.
XX
PN
     WO2006110593-A2.
XX
PD
     19-OCT-2006.
XX
PF
     07-APR-2006; 2006WO-US013172.
XX
     07-APR-2005; 2005US-0669342P.
PR
PR
     11-OCT-2005; 2005US-0725982P.
XX
PA
     (MACR-) MACROGENICS INC.
XX
     Von Haller PD, Schummer M, Meyer DW, Schubert LA, Tjoelker LW;
PΙ
XX
     WPI; 2006-814687/82.
DR
     N-PSDB; AEL84787.
DR
DR
     REFSEQ; NP_001001891.
DR
     PC:NCBI; gi48093524.
XX
     Detecting or diagnosing cancer in a subject comprises determining
PΤ
     expression of at least one gene, and comparing level of expression to a
PT
     control sample from a normal subject, where increased expression level
PT
PΤ
     indicates cancer.
XX
PS
     Claim 8; SEQ ID NO 155; 583pp; English.
XX
CC
     The invention describes a method of detecting or diagnosing cancer in a
CC
     subject comprising determining the expression level of at least one gene,
CC
     and comparing the level of expression to a corresponding control sample
```

```
from a normal subject, where cancer is detected or diagnosed if there is
CC
     an increase in the expression level of the gene relative to the
CC
     expression in the control sample. Also described are: identifying a
CC
CC
     compound to be tested for its ability to prevent, treat, manage, or
CC
     ameliorate cancer or its symptom; a compound identified by the method;
     treating cancer in a patient; treating a cancer in a subject that is
CC
CC
     fully or partially refractory to a first treatment in a patient; and a
CC
     pharmaceutical composition comprising an amount of an antibody selected
CC
     from anti-SLC12A2, anti-FLJ23375, anti-GRM5, anti-TAS2R1, anti-NRXN2,
     anti-C14orf160, anti-MGC 15668, anti-MGC33486, anti-TMEM16F, anti-FAT,
CC
     anti-KIAA0195, anti-LRFN, anti-NFASC, anti-BAT2D1, anti-MGC2963, anti-
CC
     KIAA0685, anti-EDG3, anti-GGTL3, anti-PLVAP, anti-FLJ31528, anti-
CC
CC
     FLJ90709, anti-VEZATIN, anti-TMPRSS9, anti-ATP13A5, anti-PKHD1L1, anti-
CC
     C2orf18, anti-ANKRD22, anti-FAM62B, anti-LOC57168, anti-CDKAL1, anti-
     SLC39A3v1, anti-SLC39A3v2, anti-BAT5, anti-TM9SF4, anti-DC2, anti-VAPB,
CC
     anti-XTP3TPB, anti-TACSTD2, anti-FNDC3A, anti-GK001, anti-OCIAD2, anti-
CC
     PR01855, anti-C20orf3, anti-SDFR1, anti-FLJ20481, anti-LENG4, anti-
CC
CC
     FLJ12443, anti-ARP5 Long, anti-ARP5 Short, anti-TMD0645, anti-NGEP, anti-
CC
     IL1RAP1, anti-PLXNB1, anti-ATP2B2, anti~FLJ11848, anti-ENTPD2, anti-
CC
     PPM1H, anti-KRTKAP3, anti-KCNC3, anti-TM9SF1, anti-ULBP1, anti-C19orf26,
CC
     anti-KIAA830, anti-KIAA1244, anti-KIAA1797, anti-MGC26856, anti-NETO2,
CC
     anti-SUSD2, anti-FOLR2, anti-EMR2, ENTPD1, anti-ATP10B, anti-PTK7, anti-
CC
     FLJ14681, anti-C20orf22, anti-FLJ14281, anti-FAM8A1, anti-TMED7, anti-
     C20orf108, anti-ATAD1, anti-GPR154, anti-C14orf27, anti-OSAP, anti-
CC
     FAD104, anti-FLJ90492, anti-SLC27A3, anti-RON, anti-ATP13A1, anti-
CC
     DKFZP564D166, anti-ESSPL, anti-EXTL3, anti-KAI1, anti-KIAA0960, anti-
CC
CC
     MTRNL, anti-SLC27A1, anti-GRIA, anti-OR4M1, anti-KIAA1679, or anti-UPK-1b
CC
     antibody, and a pharmaceutical carrier. The methods are useful for
CC
     detecting, diagnosing, and treating cancer, e.g. colon, lung, ovary,
     prostate, pancreas, or bladder cancer. This is the amino acid sequence of
CC
     NGEP, altered levels of expression are useful in the diagnosis or
CC
CC
     prognosis of cancer.
CC
CC
     Revised record issued on 18-OCT-2007: Enhanced with precomputed
CC
     information from BOND.
XX
```

SQ Sequence 933 AA;

```
Query Match 100.0%; Score 42; DB 11; Length 933;
Best Local Similarity 100.0%; Pred. No. 24;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

RESULT 7
AAR85775

```
AAR85775 standard; protein; 258 AA.
ID
XX
АC
     AAR85775;
XX
DT
     16-OCT-2003
                 (revised)
     27-AUG-2003
                 (revised)
DT
DT
     25-AUG-1996 (first entry)
XX
     L. lactis phage R1-t repressor protein.
DE
XX
KW
     Lactococcus lactis; lactic acid bacterium; promoter; repressor; flavour;
     food.
KW
XX
OS
     Bacteriophage r1t; Type P335.
XX
PN
     WO9531563-A1.
XX
PD
     23-NOV-1995.
XX
     12-MAY-1995; 95WO-NL000172.
PF
XX
PR
     12-MAY-1994; 94EP-00201355.
XX
PΑ
     (UNIL ) QUEST INT BV.
XX
PΙ
     Nauta A, Venema G, Kok J, Ledeboer AM;
XX
DR
     WPI: 1996-010948/01.
DR
    N-PSDB; AAT02612.
XX
PΤ
     Complex inducible promoter system from lactic acid bacterium phage - also
     modified forms with inactivated repressor gene, allowing production of
PT
PΤ
     proteins in food grade microorganisms.
XX
PS
     Disclosure; Page 33-35; 53pp; English.
XX
CC
     A complex inducible promoter system (AAT02612) is derived from phage R1-t
CC
     of Lactococcus lactis subsp. cremoris. The system includes ORF27, the rro
     gene, that codes for a protein (AAR85775) capable of repressing gene
CC
CC
     expression. This regulatory region can be exploited for the construction
CC
     of thermo-inducible gene expression systems in L. lactis, allowing prodn.
     of recombinant proteins by this food-grade microorganism. ORF27 is in
CC
CC
     opposite orientation to ORF28 (tec) and ORF29. If an inactivating
     mutation is introduced into the rro product, then ORF29 is expressed
CC
     constitutively at high level. (Updated on 27-AUG-2003 to correct OS
CC
CC
     field.) (Updated on 16-OCT-2003 to standardise OS field)
XX
SQ
     Sequence 258 AA;
```

```
85.7%; Score 36; DB 2; Length 258;
 Query Match
  Best Local Similarity 77.8%; Pred. No. 97;
 Matches
           7; Conservative 1; Mismatches
                                                   1; Indels
                                                                  0; Gaps
                                                                              0;
            1 VLLEVVPDV 9
Qу
              | | | | | | | |
Db
          189 VLIEAVPDV 197
RESULT 8
ABB53746
ID
     ABB53746 standard; protein; 278 AA.
XX
АC
     ABB53746;
XX
DT
     15-JUN-2007 (revised)
     29-AUG-2003 (revised)
DT
DT
     16-MAY-2002 (first entry)
XX
DE
     Lactococcus lactis protein pil03.
XX
KW
     Biosynthesis; biodegradation; lactic bacterium; yogurt; cheese; BOND_PC;
KW
     repressor; repressor [Bacteriophage bIL309]; cI-like;
KW
     repressor [Lactococcus phage bIL309]; prophage pi1 protein 03;
     prophage pil protein 03 [Lactococcus lactis subsp. lactis Il1403]; pil03;
KW
     prophage pil protein 03, transcriptional regulator;
KW
     repressor [bacteriophage bIL309].
ΚW
XX
OS
    Lactococcus lactis; IL1403.
XX
PN
    FR2807446-A1.
XX
PD
     12-OCT-2001.
XX
PF
     11-APR-2000; 2000FR-00004630.
XX
PR
     11-APR-2000; 2000FR-00004630.
XX
PA
     (INRG ) INRA INST NAT RECH AGRONOMIQUE.
XX
PΙ
    Bolotine A,
                  Sorokine A, Renault P, Ehrlich SD;
XX
    WPI; 2002-043418/06.
DR
    PC:NCBI; qi12723316.
DR
XX
     New nucleotide sequence useful in the identification or Lactococcus
PΤ
PΤ
     lactis and related species.
XX
PS
     Claim 6; SEQ ID NO 448; 2504pp; French.
```

```
XX
CC
     The present invention is related to a Lactococcus lactis nucleotide
     sequence (ABA90521) and related proteins (ABB53300-ABB55621). The nucleic
CC
CC
     acid sequence is useful in the detection and/or amplification of nucleic
CC
     acid sequence, particularly to identify Lactococcus lactis or related
     species. The proteins of the invention are useful for the biosynthesis or
CC
CC
     biodegradation of a composition of interest. The invention helps research
CC
     in lactic bacteria, particularly useful in the production of yogurt and
CC
     cheese. Note: The sequence data for this patent is based on equivalent
     patent WO200177334 (published 18-OCT-2001) which is available in
CC
CC
     electronic format directly from WIPO at
     ftp.wipo.int/pub/published pct sequences. (Updated on 29-AUG-2003 to
CC
CC
     standardise OS field)
CC
     Revised record issued on 15-JUN-2007: Enhanced with precomputed
CC
CC
     information from BOND.
XX
SQ
     Sequence 278 AA;
 Query Match
                          85.7%; Score 36; DB 5; Length 278;
  Best Local Similarity 77.8%; Pred. No. 1.1e+02;
 Matches
          7; Conservative 1; Mismatches 1; Indels
                                                                 0;
                                                                     Gaps
                                                                              0;
            1 VLLEVVPDV 9
Qу
              | | | | | | | |
Db
          209 VLIEAVPDV 217
RESULT 9
ABM68555
     ABM68555 standard; protein; 324 AA.
ID
XX
AC
    ABM68555;
XX
DT
     20-NOV-2003 (first entry)
XX
DE
     Photorhabdus luminescens protein sequence #1652.
XX
KW
     Antibacterial; fungicide; insecticide; polymorphism; genetic analysis;
     detection; food; gene expression; plant; animal; microorganism; toxin;
KW
     antibiotic; biopesticide; virulence factor; disease model; plague;
KW
     whooping cough.
KW
XX
OS
     Photorhabdus luminescens.
XX
PN
    WO200294867-A2.
XX
PD
     28-NOV-2002.
XX
```

```
PF
     07-FEB-2002; 2002WO-IB003040.
XX
     07-FEB-2001; 2001FR-00001659.
PR
XX
     (INSP ) INST PASTEUR.
PA
     (CNRS ) CNRS CENT NAT RECH SCI.
PA
XX
     Duchaud E, Taourit S, Glaser P, Frangeul L, Kunst F, Danchin A;
PΙ
PΙ
     Buchrieser C:
XX
DR
    WPI; 2003-148459/14.
XX
PΤ
     Genomic sequence of Photorhabdus luminescens and encoded polypeptides,
PΤ
     useful e.g. as therapeutic antimicrobials and agricultural pesticides.
XX
PS
     Claim 2; SEQ ID NO 1652; 1205pp; French.
XX
CC
     The invention relates to the isolation of genes and their encoded
CC
     proteins from Photorhabdus luminescens. The isolated sequences are
CC
     sources of probes and primers for detecting the genome of P. luminescens
CC
     and related species; to study polymorphisms; for gene analysis and for
CC
     detection/amplification of the genes. Antibodies (Ab) raised against the
CC
     polypeptides encoded by the genes are used for detection/identification
CC
     of P. luminescens, e.g. in foods. The genes, proteins, Ab and cells that
     carry a gene-containing vector are used to select compounds that
CC
     modulate, regulate, induce or inhibit expression of the genes in plants,
CC
CC
     animals or microorganisms other than P. luminescens and are able to alter
CC
     response or sensitivity to toxins and antibiotics produced by P.
CC
     luminescens. Cells transformed to express the genes are useful for
CC
     recombinant production of the proteins, particularly toxins and
CC
     antibacterials useful as insecticides, bactericides and fungicides. The
CC
     genes, proteins, vectors containing the genes and Ab are also useful
CC
     therapeutically (to treat microbial infection by bacteria or fungi that
     are sensitive to P. luminescens-encoded toxins or antibiotics) and as
CC
CC
     biopesticides. Other uses of the genes and the proteins are as virulence
CC
     factors and for identifying targets of human diseases for which P.
CC
     luminescens is a model (particularly plague and whooping cough). This
CC
     sequence represents one of the isolated P. luminescens proteins
XX
SO
     Sequence 324 AA;
                          83.3%; Score 35; DB 6; Length 324;
 Query Match
 Best Local Similarity 77.8%; Pred. No. 2e+02;
            7; Conservative 1; Mismatches 1; Indels
                                                                 0;
                                                                             0;
 Matches
                                                                     Gaps
            1 VLLEVVPDV 9
Qу
              | | | | | | | | | :
Db
         149 VLLEAVPDL 157
```

```
RESULT 10
ABM92385
     ABM92385 standard; protein; 218 AA.
ID
XX
АC
     ABM92385;
XX
DT
     02-JUN-2005 (first entry)
XX
\mathsf{DE}
     M. xanthus protein sequence, seq id 11584.
XX
KW
     Transgenic plant; DNA replication; gene regulation; gene expression.
XX
OS
     Myxococcus xanthus.
XX
PN
     US6833447-B1.
XX
     21-DEC-2004.
PD
XX
PF
     10-JUL-2001; 2001US-00902540.
XX
PR
     10-JUL-2000; 2000US-0217883P.
XX
PA
     (MONS ) MONSANTO TECHNOLOGY LLC.
XX
PΙ
     Goldman BS, Hinkle GJ, Slater SC, Wiegand RC;
XX
DR
     WPI: 2005-028716/03.
XX
PΤ
     New substantially purified Myxococcus xanthus nucleic acid molecule
     encoding a nitrite reductase, useful for determining gene expression,
PΤ
PT
     identifying mutations in a gene of interest, and for constructing
PΤ
     mutations in a gene of interest.
XX
PS
     Example 2; SEQ ID NO 11584; 25pp; English.
XX
CC
     The invention relates to a substantially purified nucleic acid molecule
CC
     encoding a nitrite reductase of SEQ ID NO. 11926. Further disclosed is a
CC
     recombinant DNA construct for expression of a nitrite reductase gene in a
CC
     plant cell, and a plant cell comprising the recombinant DNA construct.
CC
     The nucleic acid is useful for determining gene expression, identifying
     mutations in a gene of interest, and for constructing mutations in a gene
CC
     of interest. Sequences given in records for SEQ IDs 9692-16825 represent
CC
     a group of 7134 Mxyococcus xanthus proteins and peptides. Note: The
CC
     sequence data for this patent did not form part of the printed
CC
CC
     specification, but was obtained in electronic format directly from USPTO
XX
SQ
     Sequence 218 AA;
```

```
81.0%; Score 34; DB 10; Length 218;
 Query Match
  Best Local Similarity 77.8%; Pred. No. 2.1e+02;
 Matches
           7; Conservative 1; Mismatches 1; Indels
                                                                  0; Gaps
                                                                              0;
            1 VLLEVVPDV 9
Qу
              | | | | | | | |
Db
          117 VLAEVLPDV 125
RESULT 11
AFC47341
ID
     AFC47341 standard; protein; 271 AA.
XX
АC
    AFC47341;
XX
DT
     20-SEP-2007 (first entry)
XX
DE
     Wheat amino acid sequence SEQ ID NO 8711.
XX
KW
    plant; DNA mapping; gene expression.
XX
OS
     Triticum aestivum.
XX
PN
     US2006048240-A1.
XX
PD
     02-MAR-2006.
XX
PF
     01-APR-2005; 2005US-00096568.
XX
     01-APR-2004; 2004US-0558095P.
PR
XX
PA
     (ALEX/) ALEXANDROV N.
     (BROV/) BROVER V.
PA
XX
     Alexandrov N, Brover V;
PΙ
XX
DR
    WPI; 2006-421739/43.
XX
PΤ
    New isolated Sequence-Determined DNA Fragments (SDFs) from different
     plant species, e.g. corn, wheat, soybean, or rice, useful for controlling
PΤ
PT
     behavior of a gene in the chromosome or identifying a particular
     individual organism.
PT
XX
PS
     Claim 9; SEQ ID NO 8711; 87pp; English.
XX
     The invention relates to an isolated nucleic acid molecule from the
CC
     genome of a plant. Also described: (1) a vector construct comprising: (a)
CC
CC
     a first nucleic acid having a regulatory sequence capable of causing
CC
     transcription and/or translation; and (b) a second nucleic acid having
```

the sequence of the isolated nucleic acid molecule above, where the first CCCC and second nucleic acids are operably linked, and where the second nucleic acid is heterologous to any element in the vector construct; (2) CC CC a host cell comprising the isolated nucleic acid molecule above, where CC the nucleic acid molecule is flanked by an exogenous sequence, or comprising the vector construct above; (3) an isolated polypeptide CC CC comprising an amino acid sequence: (a) exhibiting at least 40-90% CC sequence identity of an amino acid sequence encoded by a sequence given CC in the specification or the Sequence Listing, or its fragment; and (b) capable of exhibiting at least one of the biological activities of the CC polypeptide encoded by the nucleotide sequence in (a); (4) an antibody CCCC capable of binding the isolated polypeptide; (5) introducing an isolated nucleic acid into a host cell; (6) transforming a host cell; (7) CC CC modulating transcription and/or translation of the nucleic acid in a host cell; (8) detecting a nucleic acid in a sample; (9) a plant or cell of a CC plant comprising the nucleic acid molecule, which is exogenous or CC CCheterologous to the plant or plant cell, or comprising the vector construct above; and (10) a plant regenerated from the plant cell above. CC CC The nucleic acids are useful for specifying a gene product in cells, CCeither as a promoter or as a protein coding sequence or as an UTR or as a CC 3' termination sequence. They are also useful in controlling the behavior CCof a gene in the chromosome, controlling the expression of a gene or as tools for genetic mapping, recognizing or isolating identical or related CCCC DNA fragments, or identifying a particular individual organism, or clustering of a group of organisms with a common trait. The present CC sequence represents a specifically claimed wheat amino acid sequence from CC CC the present invention. Note: The sequence data for this patent did not CC form part of the printed specification, but was obtained in electronic CC format directly from the USPTO web site. XX SO Sequence 271 AA; 81.0%; Score 34; DB 11; Length 271; 100.0%; Pred. No. 2.6e+02; 7; Conservative 0; Mismatches 0; 0; 0; Indels Gaps

```
Query Match
Best Local Similarity
Matches
```

3 LEVVPDV 9 QУ Db 27 LEVVPDV 33

```
RESULT 12
AFC47340
     AFC47340 standard; protein; 292 AA.
ID
XX
    AFC47340;
АC
XX
DT
     20-SEP-2007 (first entry)
XX
```

```
Wheat amino acid sequence SEQ ID NO 8710.
DE
XX
     plant; DNA mapping; gene expression.
KW
XX
OS
     Triticum aestivum.
XX
PN
     US2006048240-A1.
XX
PD
     02-MAR-2006.
XX
PF
     01-APR-2005; 2005US-00096568.
XX
PR
     01-APR-2004; 2004US-0558095P.
XX
PΑ
     (ALEX/) ALEXANDROV N.
     (BROV/) BROVER V.
PA
XX
PΙ
     Alexandrov N, Brover V;
XX
DR
     WPI; 2006-421739/43.
XX
```

New isolated Sequence-Determined DNA Fragments (SDFs) from different plant species, e.g. corn, wheat, soybean, or rice, useful for controlling behavior of a gene in the chromosome or identifying a particular individual organism.

Claim 9; SEQ ID NO 8710; 87pp; English.

PΤ

PΤ

PΤ

PT XX PS

XX

CC

CC CC

CC

CC

CC CC

CC

CC

CC

CC

CC CC

CC CC

CC

CC CC

CC

CC

CC

The invention relates to an isolated nucleic acid molecule from the genome of a plant. Also described: (1) a vector construct comprising: (a) a first nucleic acid having a regulatory sequence capable of causing transcription and/or translation; and (b) a second nucleic acid having the sequence of the isolated nucleic acid molecule above, where the first and second nucleic acids are operably linked, and where the second nucleic acid is heterologous to any element in the vector construct; (2) a host cell comprising the isolated nucleic acid molecule above, where the nucleic acid molecule is flanked by an exogenous sequence, or comprising the vector construct above; (3) an isolated polypeptide comprising an amino acid sequence: (a) exhibiting at least 40-90% sequence identity of an amino acid sequence encoded by a sequence given in the specification or the Sequence Listing, or its fragment; and (b) capable of exhibiting at least one of the biological activities of the polypeptide encoded by the nucleotide sequence in (a); (4) an antibody capable of binding the isolated polypeptide; (5) introducing an isolated nucleic acid into a host cell; (6) transforming a host cell; (7) modulating transcription and/or translation of the nucleic acid in a host cell; (8) detecting a nucleic acid in a sample; (9) a plant or cell of a plant comprising the nucleic acid molecule, which is exogenous or heterologous to the plant or plant cell, or comprising the vector

```
construct above; and (10) a plant regenerated from the plant cell above.
CC
     The nucleic acids are useful for specifying a gene product in cells,
CC
     either as a promoter or as a protein coding sequence or as an UTR or as a
CC
CC
     3' termination sequence. They are also useful in controlling the behavior
CC
     of a gene in the chromosome, controlling the expression of a gene or as
     tools for genetic mapping, recognizing or isolating identical or related
CC
CC
     DNA fragments, or identifying a particular individual organism, or
CC
     clustering of a group of organisms with a common trait. The present
CC
     sequence represents a specifically claimed wheat amino acid sequence from
     the present invention. Note: The sequence data for this patent did not
CC
CC
     form part of the printed specification, but was obtained in electronic
CC
     format directly from the USPTO web site.
XX
SO
     Sequence 292 AA;
 Query Match
                          81.0%; Score 34; DB 11; Length 292;
 Best Local Similarity 100.0%; Pred. No. 2.8e+02;
           7; Conservative 0; Mismatches 0; Indels
                                                                 0; Gaps
                                                                             0;
Qу
           3 LEVVPDV 9
              Db
           48 LEVVPDV 54
RESULT 13
AFC47339
    AFC47339 standard; protein; 323 AA.
ID
XX
АC
    AFC47339;
XX
DT
     20-SEP-2007 (first entry)
XX
     Wheat amino acid sequence SEQ ID NO 8709.
\mathsf{DE}
XX
    plant; DNA mapping; gene expression.
KW
XX
OS
     Triticum aestivum.
XX
PN
    US2006048240-A1.
XX
     02-MAR-2006.
PD
XX
PF
     01-APR-2005; 2005US-00096568.
XX
     01-APR-2004; 2004US-0558095P.
PR
XX
PΑ
     (ALEX/) ALEXANDROV N.
PA
     (BROV/) BROVER V.
XX
```

```
PI Alexandrov N, Brover V;
XX
DR WPI; 2006-421739/43.
```

XX PT

PT PT

PT XX PS

XX CC

CC

CC

CC

CC CC

CC

CC

CC

CC

CC

CC

CC

CC

CC CC

CC

CC

CC CC

CC

CC

CC CC

CC

CC

CC

CC

CC

CC

CC CC

CC

XX SQ New isolated Sequence-Determined DNA Fragments (SDFs) from different plant species, e.g. corn, wheat, soybean, or rice, useful for controlling behavior of a gene in the chromosome or identifying a particular individual organism.

Claim 9; SEQ ID NO 8709; 87pp; English.

The invention relates to an isolated nucleic acid molecule from the genome of a plant. Also described: (1) a vector construct comprising: (a) a first nucleic acid having a regulatory sequence capable of causing transcription and/or translation; and (b) a second nucleic acid having the sequence of the isolated nucleic acid molecule above, where the first and second nucleic acids are operably linked, and where the second nucleic acid is heterologous to any element in the vector construct; (2) a host cell comprising the isolated nucleic acid molecule above, where the nucleic acid molecule is flanked by an exogenous sequence, or comprising the vector construct above; (3) an isolated polypeptide comprising an amino acid sequence: (a) exhibiting at least 40-90% sequence identity of an amino acid sequence encoded by a sequence given in the specification or the Sequence Listing, or its fragment; and (b) capable of exhibiting at least one of the biological activities of the polypeptide encoded by the nucleotide sequence in (a); (4) an antibody capable of binding the isolated polypeptide; (5) introducing an isolated nucleic acid into a host cell; (6) transforming a host cell; (7) modulating transcription and/or translation of the nucleic acid in a host cell; (8) detecting a nucleic acid in a sample; (9) a plant or cell of a plant comprising the nucleic acid molecule, which is exogenous or heterologous to the plant or plant cell, or comprising the vector construct above; and (10) a plant regenerated from the plant cell above. The nucleic acids are useful for specifying a gene product in cells, either as a promoter or as a protein coding sequence or as an UTR or as a 3' termination sequence. They are also useful in controlling the behavior of a gene in the chromosome, controlling the expression of a gene or as tools for genetic mapping, recognizing or isolating identical or related DNA fragments, or identifying a particular individual organism, or clustering of a group of organisms with a common trait. The present sequence represents a specifically claimed wheat amino acid sequence from the present invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from the USPTO web site.

Sequence 323 AA;

```
Query Match 81.0%; Score 34; DB 11; Length 323; Best Local Similarity 100.0%; Pred. No. 3.2e+02;
```

```
Matches
            7; Conservative 0; Mismatches
                                                   0; Indels
                                                                  0;
                                                                              0;
                                                                      Gaps
            3 LEVVPDV 9
Qу
              Db
           79 LEVVPDV 85
RESULT 14
AFQ62535
ID
    AFQ62535 standard; protein; 374 AA.
XX
АC
    AF062535;
XX
DT
     18-OCT-2007 (first entry)
XX
     Glycine max protein SEQ ID NO:253712.
DE
XX
    plant; cold tolerance; heat tolerance; drought resistance;
KW
    herbicide resistance; pathogen resistance; pesticide resistance;
ΚW
KW
     disease-resistance; crop improvement; insect resistance;
     nitrogen fixation; plant growth regulation; plant disease;
KW
KW
     stress tolerance; seed oil; transgenic.
XX
OS
     Glycine max.
XX
PN
     US2004031072-A1.
XX
     12-FEB-2004.
PD
XX
     28-APR-2003; 2003US-00424599.
PF
XX
PR
     06-MAY-1999;
                    99US-00304517.
     05-NOV-2001; 2001US-00985678.
PR
XX
PΑ
     (LROS/) LA ROSA T J.
     (ZHOU/) ZHOU Y.
PA
PΑ
     (KOVA/) KOVALIC D K.
PA
     (CAOY/) CAO Y.
XX
     La Rosa TJ, Zhou Y, Kovalic DK, Cao Y;
PΙ
XX
     WPI; 2004-168999/16.
DR
XX
    New recombinant DNA construct, useful in producing plants with desired
PT
     properties, e.g. increased cold, heat or drought tolerance or tolerance
PT
     to herbicides, extreme osmotic conditions or pathogens and improved plant
PΤ
PΤ
     growth and development.
XX
PS
     Claim 2; SEQ ID NO 253712; 15pp; English.
```

```
XX
     The invention relates to a recombinant DNA construct, polynucleotides or
CC
     polypeptides which are useful in improving plant cold, heat or drought
CC
CC
     tolerance or tolerance to herbicides, extreme osmotic conditions,
CC
     pathogens or pests, in improving yield by modification of photosynthesis
     or of carbohydrate, nitrogen or phosphorus use and/or uptake, in
CC
CC
     manipulating growth rate in plant cells by modification of the cell cycle
CC
     pathway, in providing increased resistance to plant disease and improved
CC
     plant growth and development under at least one stress condition, in
     producing galactomannan, plant growth regulators and lignin, in
CC
     increasing the rate of homologous recombination in plants, in modifying
CC
     seed oil yield and/or content and seed protein yield and/or content and
CC
     in encoding a plant transcription factor. The present sequence represents
CC
     a Glycine max protein of the invention. Note: This sequence is not shown
CC
     in the specification but was obtained in electronic format directly from
CC
CC
     USPTO at segdata.uspto.gov/sequence.html.
XX
SQ
     Sequence 374 AA;
 Query Match
                          81.0%; Score 34; DB 9; Length 374;
                        75.0%; Pred. No. 3.8e+02;
  Best Local Similarity
 Matches
          6; Conservative 2; Mismatches 0; Indels
                                                                 0;
                                                                     Gaps
                                                                             0;
            1 VLLEVVPD 8
Qу
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Db
          243 VVLEVIPD 250
RESULT 15
ADM26215
     ADM26215 standard; protein; 407 AA.
ID
XX
АC
    ADM26215;
XX
DT
     20-MAY-2004 (first entry)
XX
DE
     Hyperthermophile Methanopyrus kandleri protein #821.
XX
     hyperthermophile; protein stability enhancement;
KW
     protein activity enhancement.
KW
XX
OS
     Methanopyrus kandleri.
XX
PN
     WO2003076575-A2.
XX
PD
     18-SEP-2003.
XX
PF
     04-MAR-2003; 2003WO-US006664.
XX
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04-MAR-2002; 2002US-0361742P.
PR
     14-MAY-2002; 2002US-0380423P.
PR
PR
     16-SEP-2002; 2002US-0410974P.
XX
PA
     (FIDE-) FIDELITY SYSTEMS INC.
PΑ
     (MALY/) MALYKH A.
XX
PΙ
     Slesarev AI, Pavlov A, Pavlova N, Kozyavkin S;
XX
DR
     WPI; 2003-748383/70.
DR
     N-PSDB; ADM27081.
XX
PΤ
     New isolated nucleic acids encoding any of about 1700 Methanopyrus
     kandleri proteins, and the encoded proteins, useful as a medicaments or
PT
     as diagnostic agents.
PT
XX
PS
     Claim 31; SEQ ID NO 821; 1023pp; English.
XX
CC
     The invention comprises the amino acid sequence of proteins from the
CC
     hyperthermophile Methanopyrus kandleri, the invention also comprises the
CC
     complete genome from Methanopyrus kandleri. The Methanopyrus kandleri
CC
     proteins of the invention are useful for enhancing the stability and/or
CC
     activity of other proteins. The Methanopyrus kandleri genome is useful in
CC
     a variety of diagnostic and analytical methods. The present amino acid
CC
     sequence represents a Methanopyrus kandleri protein of the invention.
XX
     Sequence 407 AA;
SQ
 Query Match
                          81.0%; Score 34; DB 7; Length 407;
                         75.0%; Pred. No. 4.1e+02;
 Best Local Similarity
           6; Conservative 2; Mismatches
                                                0; Indels
                                                                 0; Gaps
                                                                              0;
 Matches
            2 LLEVVPDV 9
Qу
              | | | : | | | :
Db
          199 LLEIVPDL 206
Search completed: June 30, 2008, 17:53:04
Job time: 75.875 secs
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